

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method of producing a—polymer composite fibres comprising a polymer matrix having metal nanoparticles incorporated therein, said method comprising the steps of:
 - (i) mixing metal nanoparticles with a polymer dope; and
 - (ii) solidifying the polymer composite from the dope by a fibre extrusion process.
2. (Original) A method according to claim 1, wherein the dope is stirred vigorously so as to produce a homogeneous mixture.
3. (Original) A method according to claim 2, wherein a high shear mixer is used to stir the dope.
4. (Currently amended) A method according to ~~any preceding claim~~ claim 1, wherein the metal nanoparticles are added directly to the polymer dope as a powder.
5. (Currently amended) A method according to ~~any preceding claim~~ claim 1, wherein the metal nanoparticles comprise one or more transition metals.
6. (Canceled)
7. (Canceled)

8. (Original) A method according to claim 7, wherein the fibres are extruded by a spinning technique.
9. (Original) A method according to claim 8, wherein the fibres are extruded by a wet spinning technique.
10. (Currently amended) A method according to ~~any one of claims 6 to 9~~claim 1, wherein the polymer dope comprises a linear polymeric material having fibre forming characteristics.
11. (Currently amended) A method according to ~~any preceding claim~~claim 1, wherein the metal nanoparticles have antimicrobial properties.
12. (Original) A method according to claim 11, wherein the nanoparticles comprise silver.
13. (Currently amended) A method according to ~~any one of claims 6 to 12~~claim 1, wherein the polymer matrix comprises alginate.
14. (Currently amended) A method according to ~~any one of claims 6 to 12~~claim 1, wherein the polymer matrix comprises polyacrylonitrile.
15. (Currently amended) A method according to ~~any preceding claim~~claim 1, wherein the metal nanoparticles have a size less than 500 nm.
16. (Original) A method according to claim 15, wherein the metal nanoparticles have a size less than 100 nm.
17. (Original) A method according to claim 16, wherein the metal nanoparticles have a size in the range 20 to 100 nm.

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Original) Fibres comprising a polymer matrix having at least one metal incorporated therein, wherein the at least one metal is in the form of nanoparticles.

22. (Original) Fibres according to claim 21, wherein the nanoparticles are distributed in a substantially uniform manner across the fibre cross section.

23. (Currently amended) Fibres according to claim 21 ~~or claim 22~~, wherein the metal nanoparticles have a size less than 500 nm.

24. (Original) Fibres according to claim 23, wherein the metal nanoparticles have a size less than 100 nm.

25. (Original) Fibres according to claim 24, wherein the metal nanoparticles have a size in the range 20 to 100 nm.

26. (Currently amended) Fibres according to ~~any one of claims~~ claim 21 ~~to 25~~, wherein the metal nanoparticles have antimicrobial properties.

27. (Original) Fibres according to claim 26, wherein the metal nanoparticles comprise Ag, Au, Pt, Pd, Ir, Sn, Cu, Sb, Bi, or Zn, or any combination thereof.

28. (Original) Fibres according claim 27, wherein the metal nanoparticles comprise Ag.
29. (Currently amended) Fibres according to ~~any one of claims~~claim 21 ~~to 28~~ having a diameter of less than 500 microns.
30. (Original) Fibres according to claim 29 having a diameter of less than 100 microns.
31. (Original) Fibres according to claim 30 having a diameter of 10 to 50 microns.
32. (Currently amended) Fibres according to ~~any one of claims~~claim 21 ~~to 31~~, wherein the polymer matrix comprises a synthetic polymer, a natural polymer or any combination thereof.
33. (Original) Fibres according to claim 32, wherein said natural polymer comprises alginate.
34. (Original) Fibres according claim 33, wherein the polymer matrix comprises alginate and Ag is present in the polymer matrix in an amount between 0.1 and 15 % w/w, and preferably in an amount between 0.1 and 2 % w/w.
35. (Original) Fibres according to claim 32, wherein said synthetic polymer comprises polyacrylonitrile.
36. (Original) Fibres according claim 35, wherein the polymer matrix comprises polyacrylonitrile and Ag is present in the polymer matrix in an amount between 0.05 and 2 % w/w.

37. (Currently amended) A wound dressing comprising fibres according to claim 33 ~~or claim 34.~~
38. (Currently amended) A woven or non-woven fibrous article comprising fibres according to claim 21, particularly a fabric comprising said fibres ~~according to any one of claims 21 to 37.~~

Claims 39-42 (Canceled)